

=> fil reg

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STRUCTURE FILE UPDATES: 10 JUL 2008 HIGHEST RN 1033542-87-8  
DICTIONARY FILE UPDATES: 10 JUL 2008 HIGHEST RN 1033542-87-8

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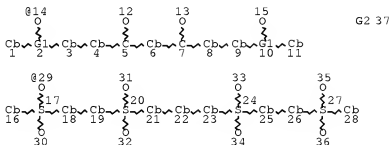
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on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=> d que stat l13  
L3 STR



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VAR G2=14/29  
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7/11/2008

10/585,808

2

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GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 37

STEREO ATTRIBUTES: NONE

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L13 16 SEA FILE=REGISTRY SSS FUL L3 AND L4

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SEARCH TIME: 00.00.06

16 ANSWERS

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FILE 'HCAPLUS' ENTERED AT 11:00:49 ON 11 JUL 2008  
E US20070196734/PN  
L1 1 S E3  
SEL RN

FILE 'REGISTRY' ENTERED AT 11:01:13 ON 11 JUL 2008  
L2 28 S E1-28

FILE 'LREGISTRY' ENTERED AT 11:19:50 ON 11 JUL 2008  
L3 STR

FILE 'REGISTRY' ENTERED AT 11:30:16 ON 11 JUL 2008

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L11 0 S L10 AND L4  
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L13 16 S L3 AND L4 FUL  
L14 12 S L2 AND L13  
SAV L13 THO808/A  
L15 4 S L13 NOT L14

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L17 4 S L15  
L18 6 S L16 OR L17

FILE 'CAOLD' ENTERED AT 11:40:02 ON 11 JUL 2008

L19 0 S L14

=> fil hcap

FILE 'HCAPLUS' ENTERED AT 11:39:08 ON 11 JUL 2008  
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FILE COVERS 1907 - 11 Jul 2008 VOL 149 ISS 3  
FILE LAST UPDATED: 10 Jul 2008 (20080710/ED)

HCaplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d l18 ibib abs hitstr hitind 1-6

L18 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 2007:1454572 HCAPLUS Full-text  
DOCUMENT NUMBER: 148:82156  
TITLE: Ion-conducting membranes suitable for electrochemical devices

7/11/2008

10/585,808

4

INVENTOR(S): Colquhoun, Howard Matthew; Zhu, Zhixue;  
Thompsett, David; Walsby, Nadia Michele  
PATENT ASSIGNEE(S): Johnson Matthey Public Limited Company, UK;  
University of Reading  
SOURCE: PCT Int. Appl., 19pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007144633	A1	20071221	WO 2007-GB2224	20070614

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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: GB 2006-11736 A 20060614

AB An ion-conducting membrane comprising a polymer component and a macrocyclic compound, wherein the macrocyclic compound is functionalized with one or more ion-conducting groups is disclosed. The membrane is suitable for use in a fuel cell.

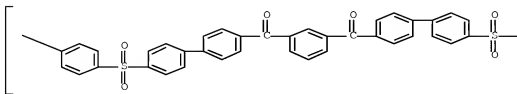
IT 960318-88-1

RL: TEM (Technical or engineered material use); USES (Uses)  
(ion-conducting membranes suitable for electrochem. devices)

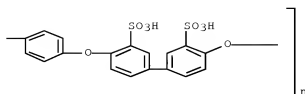
RN 960318-88-1 HCAPLUS

CN Poly[oxy(3,3'-disulfo[1,1'-biphenyl]-4,4'-diyl)oxy-1,4-phenylenesulfonyl[1,1'-biphenyl]-4,4'-diylcarbonyl-1,3-phenylenecarbonyl[1,1'-biphenyl]-4,4'-diylsulfonyl-1,4-phenylene]  
(CA INDEX NAME)

PAGE 1-A



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CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology)  
Section cross-reference(s): 38, 72  
IT 574-93-6, Phthalocyanine 27360-85-6 960318-88-1  
RL: TEM (Technical or engineered material use); USES (Uses)  
(ion-conducting membranes suitable for electrochem. devices)  
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR  
THIS RECORD. ALL CITATIONS AVAILABLE IN  
THE RE FORMAT

L18 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2008 ACS ON STN  
ACCESSION NUMBER: 2005:844131 HCAPLUS Full-text  
DOCUMENT NUMBER: 144:394385

TITLE: Importance of sulphonic acid distribution  
pattern for low equivalent weight polyaromatic  
membranes

AUTHOR(S): Walsby, N.; Hogarth, M.; Thompson, D.;  
Colquhoun, H. M.; Mortimore, W.; Zhu, Z.

CORPORATE SOURCE: Johnson Matthey Technology Centre, Sonning  
Common, RG4 9NH, UK

SOURCE: Preprints of Symposia - American Chemical  
Society, Division of Fuel Chemistry (2005),  
50(2), 523-524

CODEN: PSADFZ; ISSN: 1521-4648

PUBLISHER: American Chemical Society, Division of Fuel  
Chemistry

DOCUMENT TYPE: Journal; (computer optical disk)

LANGUAGE: English

AB The authors controlled the sequence-distribution of sulfonic acid groups along  
a polymer chain to extend the possible solubility range for polyarom. ionomer  
in fuel cell use. Three polymers of similar equivalent weight but different  
structure were prepared, a polyethersulfone copolymer, a copolymer with 3 and  
4-ring co-monomers, and the third has a 9-ring monomer unit. When used in a  
conventional platinum catalyst fuel cell, the membrane with the 9-ring  
repeating unit was able to maintain a constant voltage of close to 0.8 V at  
500 mA/cm<sup>2</sup>, 80 °C, 100% RH for over 450 h.

IT 860438-83-1DF, sulfonated 860438-84-2DP,  
sulfonated

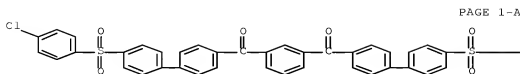
RL: DEV (Device component use); PRP (Properties); SPN (Synthetic  
preparation); PREP (Preparation); USES (Uses)  
(importance of sulfonic acid distribution pattern for low equivalent  
weight polyarom. membranes)

RN 860438-83-1 HCAPLUS

CN Methanone, 1,3-phenylenebis[4'-[(4-chlorophenyl)sulfonyl][1,1'-  
biphenyl]-4-yl]-, polymer with [1,1'-biphenyl]-4,4'-diol (9CI) (CA  
INDEX NAME)

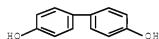
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CRN 860438-82-0  
 CMF C44 H28 Cl2 O6 S2



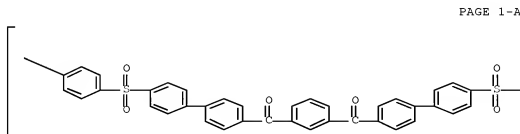
CM 2

CRN 92-88-6  
 CMF Cl2 H10 O2

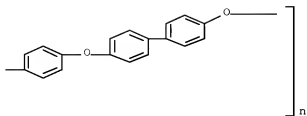


RN 860438-84-2 HCAPLUS

CN Poly(oxy[1,1'-biphenyl]-4,4'-diyl-oxy-1,4-phenylenesulfonyl[1,1'-biphenyl]-4,4'-diylcarbonyl-1,3-phenylenecarbonyl[1,1'-biphenyl]-4,4'-diylsulfonyl-1,4-phenylene) (9CI) (CA INDEX NAME)



PAGE 1-B



CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology)  
 Section cross-reference(s): 35, 36, 76  
 IT 170491-12-0DP, sulfonated 860438-83-1DP, sulfonated  
 860438-84-2DP, sulfonated 882698-07-9DP, sulfonated  
 RL: DEV (Device component use); PRP (Properties); SPN (Synthetic  
 preparation); PREP (Preparation); USES (Uses)  
 (importance of sulfonic acid distribution pattern for low equivalent  
 weight polyarom. membranes)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR  
 THIS RECORD. ALL CITATIONS AVAILABLE IN  
 THE RE FORMAT

L18 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2008 ACS ON STN

ACCESSION NUMBER: 2005:673341 HCAPLUS Full-text

DOCUMENT NUMBER: 143:154228

TITLE: Ion-conducting polymers and membranes comprising  
 them

INVENTOR(S): Colquhoun, Howard Matthew; Zhu, Zhixue;  
 Mortimore, William Alexander; Hogarth, Martin  
 Philip; Walsby, Nadia Michele

PATENT ASSIGNEE(S): Johnson Matthey Public Limited Company, UK

SOURCE: PCT Int. Appl., 44 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

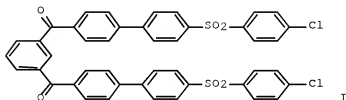
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005068536	A1	20050728	WO 2005-GB77	20050112
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EP 1704175	A1	20060927	EP 2005-701847	
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CN 1910222	A	20070207	CN 2005-80002277	
				200501 12
JP 2007517952	T	20070705	JP 2006-548391	
				200501 12
US 20070196734	A1	20070823	US 2007-585808	
				200704 30
PRIORITY APPLN. INFO.:			GB 2004-626	A
				200401 13
			WO 2005-GB77	W
				200501 12

GI



- AB An ion-conducting polymer wherein at least 80% of the repeat units comprise an ion-conducting region and a spacer region is disclosed. The ion-conducting region has an aromatic backbone of one or more aromatic groups, wherein at least one ion-conducting functional group is attached to each aromatic group. The spacer region has an aromatic backbone of at least four aromatic groups, wherein no ion-conducting functional groups are attached to the aromatic backbone. The polymer is suitable for use as a fuel cell membrane, and can be incorporated into membrane electrode assemblies. I was prepared and polymerized with 4,4'-biphenol, then sulfonated to give an ion-conducting polymer.
- IT 126351-48-2DP, sulfonated 126428-11-3DP, sulfonated 860438-83-1DP, sulfonated 860438-84-2DP, sulfonated 860438-85-3DP, sulfonated 860438-86-4DP, sulfonated 860438-87-5DP, sulfonated 860438-88-6DP, sulfonated 860438-90-0DP, sulfonated 860438-91-1DP, sulfonated 860438-94-4DP, sulfonated 860438-95-5DP, sulfonated
- RL: IMF (Industrial manufacture); TEM (Technical or engineered)

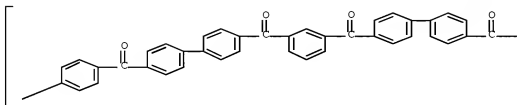


material use); PREP (Preparation); USES (Uses)  
(ion-conducting polymers and membranes comprising them)

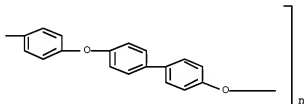
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PAGE 1-A



PAGE 1-B



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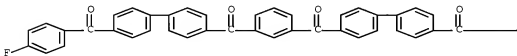
CN Methanone, 1,3-phenylenebis[[4'-(4-fluorobenzoyl)[1,1'-biphenyl]-4-yl]-, polymer with [1,1'-biphenyl]-4,4'-diol (9CI) (CA INDEX NAME)

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CRN 126428-10-2

CMF C46 H28 F2 O4

PAGE 1-A



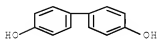
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CRN 92-88-6

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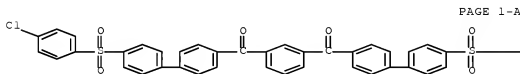
RN 860438-83-1 HCAPLUS

CN Methanone, 1,3-phenylenebis[[4'-[(4-chlorophenyl)sulfonyl][1,1'-biphenyl]-4-yl]-, polymer with [1,1'-biphenyl]-4,4'-diol (9CI) (CA INDEX NAME)

CM 1

CRN 860438-82-0

CMF C44 H28 Cl2 O6 S2



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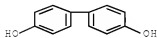


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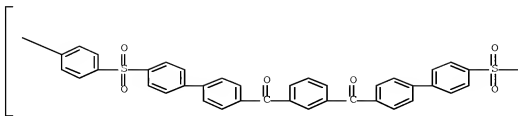
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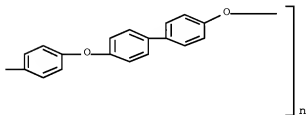
RN 860438-84-2 HCAPLUS

CN Poly(oxy[1,1'-biphenyl]-4,4'-diyloxy-1,4-phenylenesulfonyl[1,1'-biphenyl]-4,4'-diylcarbonyl-1,3-phenylenecarbonyl[1,1'-biphenyl]-4,4'-diylsulfonyl-1,4-phenylene) (9CI) (CA INDEX NAME)

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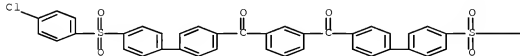
CN Benzenesulfonic acid, 3,3'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[6-hydroxy-, polymer with 1,3-phenylenebis[[4'-[4-(4-chlorophenyl)sulfonyl][1,1'-biphenyl]-4-yl]methanone] (9CI) (CA INDEX NAME)

CM 1

CRN 860438-82-0

CMF C44 H28 Cl2 O6 S2

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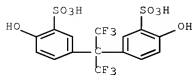


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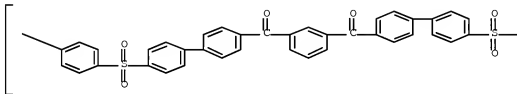
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CMF C15 H10 F6 O8 S2

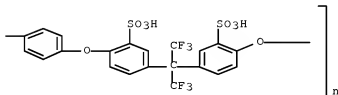


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CN Poly[oxy(2-sulfo-1,4-phenylene)[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene](3-sulfo-1,4-phenylene)oxy-1,4-phenylenesulfonyl[1,1'-biphenyl]-4,4'-diylcarbonyl-1,3-phenylenecarbonyl[1,1'-biphenyl]-4,4'-diylsulfonyl-1,4-phenylene] (9CI) (CA INDEX NAME)

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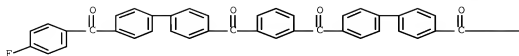


RN 860438-87-5 HCAPLUS  
CN Methanone, 1,3-phenylenebis[[4'-(4-fluorobenzoyl)[1,1'-biphenyl]-4-yl]-, polymer with 4,4'-[1,4-phenylenebis(oxy)]bis[phenol] (9CI) (CA INDEX NAME)

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CRN 126428-10-2  
CMF C46 H28 F2 O4

PAGE 1-A



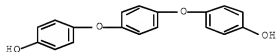
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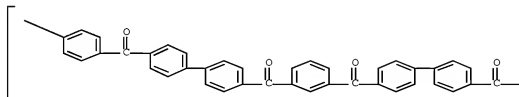
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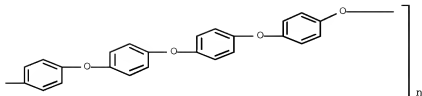
RN 860438-88-6 HCAPLUS

CN Poly(oxy-1,4-phenyleneoxy-1,4-phenyleneoxy-1,4-phenyleneoxy-1,4-phenylenecarbonyl[1,1'-biphenyl]-4,4'-diylcarbonyl-1,3-phenylenecarbonyl[1,1'-biphenyl]-4,4'-diylcarbonyl-1,4-phenylene) (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



RN 860438-90-0 HCAPLUS

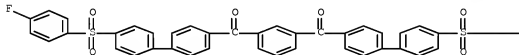
CN Methanone, 1,3-phenylenebis[[4'-[(4-fluorophenyl)sulfonyl][1,1'-biphenyl]-4-yl]-, polymer with 4,4'-[1,4-phenylenebis(oxy)]bis[phenol] (9CI) (CA INDEX NAME)

CM 1

CRN 860438-89-7

CMF C44 H28 F2 O6 S2

PAGE 1-A



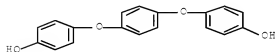
PAGE 1-B



CM 2

CRN 15051-26-0

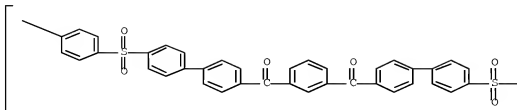
CMF C18 H14 O4



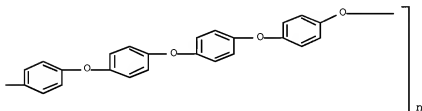
RN 860438-91-1 HCAPLUS

CN Poly(oxy-1,4-phenyleneoxy-1,4-phenyleneoxy-1,4-phenylenesulfonyl[1,1'-biphenyl]-4,4'-diylcarbonyl-1,3-phenylenecarbonyl[1,1'-biphenyl]-4,4'-diylsulfonyl-1,4-phenylene) (9CI) (CA INDEX NAME)

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RN 860438-94-4 HCAPLUS

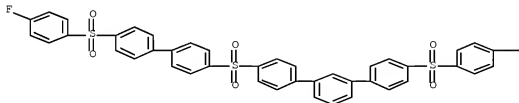
CN Phenol, 4,4'-[1,4-phenylenebis(oxy)]bis-, polymer with  
 4,4''-bis[[4'-[(4-fluorophenyl)sulfonyl][1,1'-biphenyl]-4-  
 yl]sulfonyl]-1,1':3',1''-terphenyl (9CI) (CA INDEX NAME)

CM 1

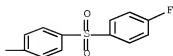
CRN 860438-93-3

CMF C54 H36 F2 O8 S4

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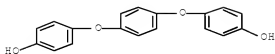
PAGE 1-B



CM 2

CRN 15051-26-0

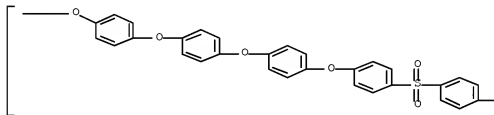
CMF C18 H14 O4



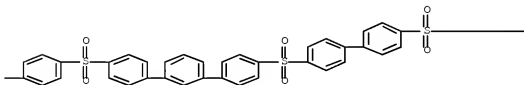
RN 860438-95-5 HCAPLUS

CN Poly(oxy-1,4-phenyleneoxy-1,4-phenyleneoxy-1,4-phenyleneoxy-1,4-phenylenesulfonyl[1,1'-biphenyl]-4,4'-diylsulfonyl[1,1':3',1''-terphenyl]-4,4''-diylsulfonyl[1,1'-biphenyl]-4,4'-diylsulfonyl-1,4-phenylene) (9CI) (CA INDEX NAME)

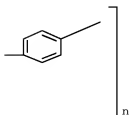
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PAGE 1-C





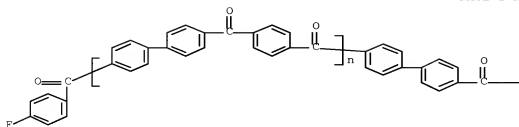
IC ICM C08G075-00  
 ICS C08G075-23; C08G073-10; H01M008-00; H01M008-02; H01M008-10  
 CC 37-3 (Plastics Manufacture and Processing)  
 Section cross-reference(s): 38, 52  
 IT 126351-48-2DP, sulfonated 126428-11-3DP,  
 sulfonated 860438-83-1DP, sulfonated 860438-84-2DP  
 , sulfonated 860438-85-3DP, sulfonated  
 860438-86-4DP, sulfonated 860438-87-5DP,  
 sulfonated 860438-88-6DP, sulfonated 860438-90-0DP  
 , sulfonated 860438-91-1DP, sulfonated  
 860438-94-4DP, sulfonated 860438-95-5DP,  
 sulfonated  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered  
 material use); PREP (Preparation); USES (Uses)  
 (ion-conducting polymers and membranes comprising them)  
 REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE  
 FOR THIS RECORD. ALL CITATIONS AVAILABLE  
 IN THE RE FORMAT

L18 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1991:656964 HCAPLUS Full-text  
 DOCUMENT NUMBER: 115:256964  
 ORIGINAL REFERENCE NO.: 115:43721a,43724a  
 TITLE: Bis(acid chloride) terminated polyaryyl ether  
 ketone oligomer  
 INVENTOR(S): Clendinning, Robert A.; Harris, James E.;  
 Kwiatkowski, George T.; McMaster, Lee P.;  
 Matzner, Markus; Winslow, Paul A.  
 PATENT ASSIGNEE(S): Amoco Corp., USA  
 SOURCE: U.S., 20 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 5037936	A	19910806	US 1989-342249	198904 24
PRIORITY APPLN. INFO.:			US 1989-342249	198904 24

AB The title oligomers have  $\geq 3$  repeating units containing  $\geq 1$  of biphenylene,  
 terphenylene, naphthylene and anthracenylene groups with number-average mol.  
 weight  $\leq 10,000$ , and are useful in preparation of block copolymers.  
 IT 122107-09-9P  
 RL: IMF (Industrial manufacture); PREP (Preparation)  
 (manufacture of, for preparation of block copolymers)  
 RN 122107-09-9 HCAPLUS  
 CN Poly([1,1'-biphenyl]-4,4'-diylcarbonyl-1,4-phenylenecarbonyl),  
 $\alpha$ -(4-fluorobenzoyl)- $\omega$ -(4'-(4-fluorobenzoyl)[1,1'-  
 biphenyl]-4-yl)- (9CI) (CA INDEX NAME)

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IC ICM C08G008-02  
 CCS C08G014-00; C07C031-18  
 INCL 528125000  
 CC 35-5 (Chemistry of Synthetic High Polymers)  
 IT 403-43-0DP, reaction products with biphenyl-terephthaloyl chloride  
 copolymer 122106-87-0DP, reaction products with fluorobenzoyl  
 chloride 122107-09-9P  
 RL: IMF (Industrial manufacture); PREP (Preparation)  
 (manufacture of, for preparation of block copolymers)

L18 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1990:180126 HCAPLUS Full-text  
 DOCUMENT NUMBER: 112:180126  
 ORIGINAL REFERENCE NO.: 112:30487a,30490a  
 TITLE: Aryl ketone and polyaryl ethers made therefrom  
 INVENTOR(S): Newton, Alan Branford  
 PATENT ASSIGNEE(S): Imperial Chemical Industries PLC, UK  
 SOURCE: Brit. UK Pat. Appl., 19 pp.  
 CODEN: BAXXDU  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2217711	A	19891101	GB 1989-8701	19890418
PRIORITY APPLN. INFO.:			GB 1988-10202	A 19880429

OTHER SOURCE(S): CASREACT 112:180126

AB An aryl ketone m-C<sub>6</sub>H<sub>4</sub>(CO-p-C<sub>6</sub>H<sub>4</sub>-p-C<sub>6</sub>H<sub>4</sub>CO-p-C<sub>6</sub>H<sub>4</sub>X)<sub>2</sub> (I; X = halo) is prepared and used in the preparation of polyether-polyketones. A mixture of 0.5 mol 4-FC<sub>6</sub>H<sub>4</sub>COCl, 100 g AlCl<sub>3</sub>, and 60 mL 1,2,4-trichlorobenzene (II) was treated at 50° with 0.5 mol biphenyl in I, heated slowly to 160° to give 4-(4-fluorobenzoyl)biphenyl, treated at 40° with 0.26 mol isophthaloyl chloride and 66.7 g AlCl<sub>3</sub>, and heated to 180° during 3.5 h to give I (X = F) which was polymerized with 4,4'-dihydroxybiphenyl or hydroquinone to give a polyether-polyketone.

IT 126324-37-6P 126351-48-2P 126428-11-3P

126461-31-2P

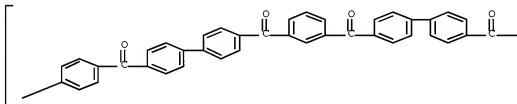
RL: PREP (Preparation)

(preparation of)

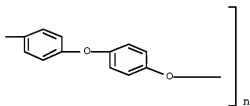
RN 126324-37-6 HCAPLUS

CN Poly(oxy-1,4-phenyleneoxy-1,4-phenylenecarbonyl[1,1'-biphenyl]-4,4'-diylcarbonyl-1,3-phenylenecarbonyl[1,1'-biphenyl]-4,4'-diylcarbonyl-1,4-phenylene) (9CI) (CA INDEX NAME)

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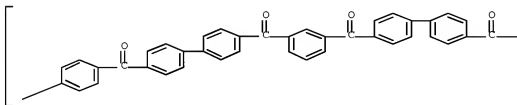
PAGE 1-B



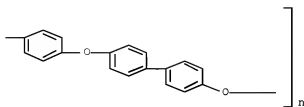
RN 126351-48-2 HCAPLUS

CN Poly(oxy[1,1'-biphenyl]-4,4'-diyoxy-1,4-phenylenecarbonyl[1,1'-biphenyl]-4,4'-diylcarbonyl-1,3-phenylenecarbonyl[1,1'-biphenyl]-4,4'-diylcarbonyl-1,4-phenylene) (9CI) (CA INDEX NAME)

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RN 126428-11-3 HCAPLUS

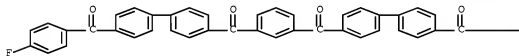
CN Methanone, 1,3-phenylenebis[[4'-(4-fluorobenzoyl)[1,1'-biphenyl]-4-yl]-, polymer with [1,1'-biphenyl]-4,4'-diol (9CI) (CA INDEX NAME)

CM 1

CRN 126428-10-2

CMF C46 H28 F2 O4

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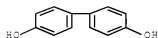
PAGE 1-B



CM 2

CRN 92-88-6

CMF C12 H10 O2



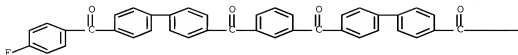
RN 126461-31-2 HCAPLUS

CN Methanone, 1,3-phenylenebis[[4'-(4-fluorobenzoyl)[1,1'-biphenyl]-4-yl]-, polymer with 1,4-benzenediol (9CI) (CA INDEX NAME)

CM 1

CRN 126428-10-2  
CMF C46 H28 F2 O4

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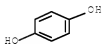


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CM 2

CRN 123-31-9  
CMF C6 H6 O2



IC ICM C07C049-784  
ICS C08G065-40; C08G067-00  
CC 35-5 (Chemistry of Synthetic High Polymers)  
Section cross-reference(s): 25  
IT 126324-37-6P 126351-48-2P 126428-10-2P  
126428-11-3P 126461-31-2P  
RL: PREP (Preparation)  
(preparation of)

L18 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1989:478864 HCAPLUS [Full-text](#)  
DOCUMENT NUMBER: 111:78864  
ORIGINAL REFERENCE NO.: 111:13303a,13306a  
TITLE: Poly(aryl ether ketone) block copolymers and  
their manufacture  
INVENTOR(S): Clendinning, Robert A.; Harris, James E.;  
Kwiatkowski, George T.; McMaster, Lee P.;  
Matzner, Markus; Winslow, Paul A.  
PATENT ASSIGNEE(S): Amoco Corp., USA  
SOURCE: U.S., 24 pp. Cont.-in-part of U.S. Ser. No.  
729,580.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4786694	A	19881122	US 1987-39310	19870416
US 4774296	A	19880927	US 1985-729580	19850502
EP 221149	A1	19870513	EP 1986-903053	19860501
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE CN 86103808	A	19870304	CN 1986-103808	19860502
CA 1267993	A1	19900417	CA 1986-508292	19860502
US 4891167	A	19900102	US 1988-167034	19880311
US 4861915	A	19890829	US 1988-174849	19880329
PRIORITY APPLN. INFO.:			US 1985-729580	A2 19850502
			US 1987-39310	A3 19870416
AB	Tough and crystalline title polymers with m.p. $\geq 100^\circ$ greater than its second order transition temperature contain biphenylene, terephenylene, naphthylene, and (or) anthracenylene units.. Thus, a mixture of Ph2SO2 60.00, hydroquinone 3.30, 4,4'-difluorobenzophenone 5.89, Na2CO3 6.16, and K2CO3 0.42 g in 25 mL xylene was heated at $200^\circ$ and $250^\circ$ for 30 min each time, then at $300^\circ$ for 1 h, combined with 5.59 g 4,4'-biphenol and 10.64 g 1,4-bis(p-fluorobenzoyl)benzene, and heated for 15 min to give a OH-terminated block copolymer with reduced viscosity 0.51 dL/g (1 g/100 mL H2SO4) and m.p.'s 323.4 and $420.8^\circ$ .			
IT	122107-09-9P RL: IMF (Industrial manufacture); PREP (Preparation) (manufacture of, as precursors for high-melting polyoxyarylene-polyketones)			
RN	122107-09-9 HCAPLUS			
CN	Poly([1,1'-biphenyl]-4,4'-diylcarbonyl-1,4-phenylenecarbonyl), $\alpha$ -(4-fluorobenzoyl)- $\omega$ -[4'-(4-fluorobenzoyl)] [1,1'-biphenyl]-4-yl)- (9CI) (CA INDEX NAME)			

